

REMARKS/ARGUMENTS

The Office Action mailed September 3, 2002, has been carefully reviewed in light of the Examiner's helpful comments and suggestions.

As a result of the Office Action, claim 1 stands rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention. Moreover, claim 1 stands rejected under 35 U.S.C. 103(a) unpatentable over Qiao in view of Tai. Claim 1 has been amended to correct a minor typographical error. These references have been carefully reviewed but are not believed to show or suggest Applicants' claimed invention in any manner. Reconsideration and allowance of claim 1 is therefore respectfully requested in view of the following remarks.

Rejection under 35 U.S.C. 112, first paragraph

To satisfy the requirements of Section 112, first paragraph, it is not necessary for the subject matter of the later claim to be described literally in the specification. *See, e.g., In re Lukach*, 169 USPQ 795, 796 (CCPA 1971) (“[U]nder the proper circumstances, drawings alone may provide a ‘written description’ of an invention . . .”). Rather, it is sufficient that the specification convey clearly to those skilled in the art that the applicant invented the specific subject matter later claimed. Applicants argue that the recitation of “a single light discharge opening” in claim 1 does not violate the requirements of Section 112, first paragraph. The support for this limitation is clearly found in Figures 1 and 2 of the drawings so that one of skill in the art would recognize the LED would have a single light discharge opening. Therefore, it is respectfully requested that the Section 112, first paragraph rejection be withdrawn.

Rejection under 35 U.S.C. 103(a)

Each of the following arguments provide an independent basis for patentability of the invention claimed in claim 1 over the combination of Qiao and Tai.

First, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP 2143.03. Claim 1 requires a diffusion and reflection plate for diffusing and reflecting the light discharged from the rear side surface. Qiao teaches a reflector 28 placed adjacent the end 14 to reflect the light back into the light guide. *See* col. 2, lines 62-63. That is, the reflector 28 only operates to reflect the light back into the light guide, and cannot operate or be considered as a diffusion plate, as required by claim 1. Moreover, neither Qiao nor Tai, taken individually or in combination, teach or suggest a diffusion and reflection plate. Neither references provide any relevant evidence so as a reasonable mind might accept as adequate to support the conclusion that a deflector means a diffusion and deflection plate.

Second, the fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish *prima facie* obviousness. *See* MPEP 2143.01. The only reasons the Examiner has provided in establishing *prima facie* obviousness are that “the arrangement of grooves in a surface in a continuously manner is clearly suggested to one skilled in the art as can be seen in the system by [T]ai et al.” (*See Office Action*, page 4), and that “it would have been obvious to one skilled in the art at the time the invention was made to modify the device provided by Qiao et al by using a plurality of grooved arranged in a continuous manner as suggested by [T]ai et al for the purpose of improving the light distribution and/or meeting a particular application.” (*See Office Action*, pages 4-5). Here, the Examiner has

provided no clue as to where support is found for the reason set forth as the suggestion or motivation to combine the references, and therefore it stands merely as the Examiner's unsupported opinion.

Each issue raised in the Office Action mailed September 3, 2002, has been addressed and it is believed that claim 1 is now in condition for allowance. Wherefore, Applicant respectfully request a timely Notice of Allowance be issued in this case.

Respectfully submitted,
DENNISON, SCHULTZ &
DOUGHERTY

By: 

Amir H. Behnia
Reg. No. 50,215
(703) 412-1155 Ext. 16

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

1. (Four Times Amended) An illuminating device for a display comprising:

a display panel;

a light guide having a light reflection surface, a light discharge surface opposite to the light reflection surface and parallel to the light reflection surface, a front side surface, and a rear side surface, and disposed under the display panel so that the light discharge surface opposes to the display panel;

an LED having a single light discharge opening and provided to oppose to the front side surface of the light guide at a central position of the front side surface;

a plurality of triangular grooves continuously formed in the light reflection surface from end to end,

each of the triangular grooves comprising a front side having a first angle with respect to a line perpendicular to the light discharge surface and a rear side having a second angle with respect to a line perpendicular to the light discharge surface which is smaller than the first angle; and,

a diffusion and reflection plate disposed to oppose to the rear side surface of the light guide so that the light [discharge] discharged from the rear side surface is diffused and reflected, wherein

the first angle and the second angle are selected so that the display panel is illuminated by a mixture of primary light reflected from the front side and secondary light reflected from the diffusion and reflection plate and reflected from the rear side.